FM/AM Compact Disc Player

Operating Instructions _____

ΕN

Owner's Record

The model and serial numbers are located on the bottom of the unit. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CDX-C560 Serial No.

For installation and connections, see the supplied installation/connections manual



CDX-C560

Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

CAUTION

The use of optical instruments with this product will increase eye hazard.

Welcome!

Thank you for purchasing the Sony Compact Disc Player. This unit lets you enjoy a variety of features by using either an optional rotary remote or an optional wireless remote.

In addition to the CD playback and the radio operations, you can expand your system by connecting an optional CD/MD changer.

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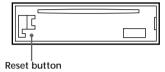
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Getting Started

Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.

Press the reset button with a pointed object, such as a ball-point pen.



Notes

- Pressing the reset button will erase the clock and some memorized functions.
- When you connect the power supply cord to the unit or reset the unit, wait for about 10 seconds before you insert a disc. Do not insert a disc within these 10 seconds; otherwise, the unit will not be reset, and you will have to press the reset button again.

Detaching the front panel

You can detach the front panel of this unit to prevent the unit from being stolen.

- 1 Press OFF.
- 2 Press (RELEASE) to open up the front panel. Then slide the font panel a little to the left, and pull it towards you.

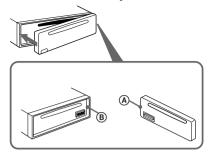


Notes

- Be sure not to drop the panel when detaching it from the unit.
- If you press (RELEASE) to detach the panel while the unit is still on, the unit will turn off automatically to prevent the speakers from being damaged.
- When you carry the front panel with you, put it in the supplied front panel case.

Attaching the front panel

Align part (a) of the front panel to part (b) of the unit as illustrated, and push until it clicks.



Notes

- · Be sure not to attach the front panel upside down.
- Do not press the front panel hard against the unit when attaching it. Press it lightly against the unit.
- Do not press hard or put excessive pressure on the display window of the front panel.
- Do not expose the front panel to direct sunlight, heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight where there may be a considerable rise in temperature.

Caution alarm

If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the POWER SELECT switch is set to the (a) position).

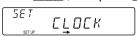
If you connect an optional power amplifier and do not use the built-in amplifier, the beep tone will be disabled.

Setting the clock

The clock has a 12-hour digital indication.

Example: Set the clock to 10:08

1 Press (SHIFT), then press (2) (SET UP).



1 Press **4** (→).



The hour digit flashes.

2 Set the hour.





3 Press **4** (→).



The minutes digits flash.

4 Set the minutes.





2 Press SHIFT).



The clock starts.

3 Press (SHIFT). When the mode setting is complete, the normal playback mode appears.

Note

If the POWER SELECT switch on the bottom of the unit is set to the 3 position, turn the power on first, then set the clock.

CD Player

Listening to a CD

Simply insert the CD.
Playback starts automatically.
Labelled side up



If a CD is already inserted, press $\fbox{\cite{SOURCE}}$ repeatedly until "CD" appears.

Elapsed playing time

Note

To play back an 8 cm (3 in.) CD, use the optional Sony compact disc single adapter (CSA-8).

То	Press
Stop playback	▲ or OFF
Eject the CD	_

Changing the displayed items

Each time you press <u>DSPL</u>, the item changes as follows:

Track number ←→ Clock

Locating a specific track

Automatic Music Sensor (AMS)

During playback, press either side of SEEK/AMS momentarily.



To locate succeeding tracks

To locate preceding tracks

Locating a specific point in a track

Manual Search

During playback, press and hold either side of (SEEK/AMS). Release the button when you have found the desired point.



To search forward

To search backward

Note

If " _ _ _ _ " or " ¬ ¬ ¬ ¬" appears in the display, that means you have reached the beginning or the end of the disc and you cannot go any further.

Playing a CD in various modes

You can play CDs in various modes:

- INTRO (Intro Scan) lets you play the first 10 seconds of all the tracks.
- REP (Repeat Play) repeats the current track.
- SHUF (Shuffle Play) plays all the tracks in random order.

Searching for the desired track

- Intro Scan

1 During playback, press SHIFT. Every time you press SHIFT, only the items you can select light up.



2 Press ③ (PLAY MODE) repeatedly until "INTRO" appears.



3 Press ④ (→) to select "INTRO-ON." Intro Scan starts.



4 Press (SHIFT).

To go back to the normal playback mode, select "INTRO-OFF" in step 3 above.

Playing tracks repeatedly

- Repeat Play
- 1 During playback, press SHIFT.
- 2 Press (6) (REP) repeatedly until "REP-1" appears.

Repeat Play starts.



3 Press (SHIFT).

To go back to the normal playback mode, select "REP-OFF" in step 2 above.

Playing tracks in random order — Shuffle Play

- 1 During playback, press SHIFT).
- 2 Press ⑦ (SHUF) repeatedly until "SHUF-1" appears. Shuffle Play starts.

3 Press (SHIFT).

To go back to the normal playback mode, select "SHUF-OFF" in step 2 above.

Radio

Memorizing stations automatically

Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals and memorizes them in the order of their frequencies. You can store up to 10 stations on each band (FM1, FM2 and AM).

Caution

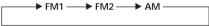
When tuning in a station while driving, use Best Tuning Memory to prevent accidents.

- 1 Press (SOURCE) repeatedly to select the tuner.
 - Each time you press (SOURCE), the source changes as follows:

CD ←→ TUNER

2 Press (MODE) repeatedly to select the

Each time you press (MODE), the band changes as follows:



- 3 Press (SHIFT).
- 4 Press (3) (PLAY MODE) repeatedly until "BTM" appears.
- 5 Press 4 (\rightarrow) until "B.T.M" appears. The unit stores stations in the order of their frequencies on the number buttons. A beep sounds and the setting is stored.
- 6 Press (SHIFT).

- · The unit does not store stations with weak signals. If only a few stations are received, some number buttons will retain heir former setting.
- · When a number is indicated in the display, the unit starts storing stations from the one currently displayed.
- · If a CD is not in the unit, only the tuner band appears even if you press SOURCE).

Memorizing only the desired stations

You can store up to 10 stations on each band (20 for FM1 and FM2, 10 for AM) in the order of your choice.

- 1 Press (SOURCE) repeatedly to select the tuner
- 2 Press MODE repeatedly to select the band (FM1, FM2 or AM).
- 3 Press either side of (SEEK/AMS) to tune in the station you want to store on the number button.
- 4 Press the desired number button (1) to (10)) for two seconds until "MEM" appears.

The number button indication appears in the display.

Note

If you try to store another station on the same number button, the previously stored station will be erased.

Receiving the memorized stations

- 1 Press SOURCE repeatedly to select the tuner.
- 2 Press MODE repeatedly to select the band (FM1, FM2 or AM).
- 3 Press the number button (1 to 10) momentarily where the desired station is stored.

If you cannot tune in a preset station

Press either side of (SEEK/AMS) momentarily to search for the station (Automatic Tuning).

Scanning stops when the unit receives a station. Press either side of (SEEK/AMS) repeatedly until the desired station is received.

Note

If the automatic tuning stops too frequently, press (SHIFT), then press (3) (PLAY MODE) repeatedly until "LOCAL" (local seek mode) is displayed. Then press (4) (→) to select "ON."

Only the stations with relatively strong signals will be tuned in.

Tip

If you know the frequency of the station you want to listen to, press and hold either side of (SEEK/AMS) for two seconds until the desired frequency appears (manual tuning).

If FM stereo reception is poor

- Monaural Mode
- 1 Press SHIFT, then press ③ (PLAY MODE) repeatedly until "MONO" appears.
- 2 Press ④ (→) repeatedly until "MONO-ON" appears. The sound improves, but becomes
- monaural ("ST" disappears).

3 Press (SHIFT).

To go back to the normal mode, select "MONO-OFF" in step 2 above.

Changing the displayed items

Each time you press (DSPL), the item alternates between the frequency and the clock.

Storing the station names

— Station Memo

You can assign a name to each radio station and store it in memory. The name of the station currently tuned in appears in the display. You can store up to eight characters for a station.

Storing the station names

- 1 Tune in a station whose name you want to store.
- 2 Press LIST for two seconds.

3 Enter the characters.

bar).

Press + to select the desired characters.

If you press —, the characters appear in the reverse order.

If you want to put a blank space between characters, select "_" (under-

2 Press ④ (→) after locating the desired character.

The flashing cursor moves to the next space.

If you press \bigcirc (\leftarrow), the flashing cursor moves to the left.

- 3 Repeat steps 1 and 2 to enter the entire name.
- 4 To return to the normal radio reception, press (LIST) for two seconds.

Tip

To erase/correct a name, enter "_" (under-bar) for each character.

Displaying the station name

Press (DSPL) during radio reception.

Each time you press (DSPL), the item changes as follows:

➤ Station name* — Frequency — Clock –

* If the station name of a station is not stored, "NO NAME" appears in the display for one second.

Erasing the station name

- 1 Tune in any station and press (LIST) for two seconds.
- 2 Press (DSPL) for two seconds.
- 3 Press + or to select the name that you want to erase.
- 4 Press (5) (ENTER) for two seconds. The name is erased. Repeat steps 3 and 4 if you want to erase other names.
- 5 Press (LIST) for two seconds. The unit returns to the normal radio reception mode.

Locating a station by name — List-up

1 Press (LIST) momentarily.
The name assigned to the station currently playing appears in the display.

LST 3 WRKI 55

- 2 Press LIST repeatedly until you find the desired station.
- **3** Press (5) (ENTER) to tune in the desired station.

Note

Once the station name or frequency has been displayed for five seconds, the display goes back to its normal mode. To turn off the display, press DSPL.

Other Functions

Adjusting the sound characteristics

You can adjust the bass, treble, balance and fader.

Each source can store the bass and treble levels independantly.

1 Select the item you want to adjust by pressing SOUND repeatedly.

VOL (volume) \rightarrow BAS (bass) \rightarrow TRE (treble) \rightarrow BAL (balance) \rightarrow FAD (fader)

2 Adjust the selected item by pressing \oplus or \bigcirc .

Adjust within three seconds after selecting. (After three seconds, the buttons function as volume control buttons.)

Muting the sound

Press (MUTE).

"MUTE-ON" flashes momentarily.

To restore the previous volume level, press (MUTE) again.

Tip

The unit decreases the volume automatically when a telephone call comes in (Telephone mute function).

Changing the sound and display settings

You can set:

- CLOCK (page 5).
- D.INFO (dual information) to display the clock and the play mode at the same time (ON) or to display the information alternately (OFF).
- AMBER/GREEN to change the illumination color to amber or green.
- AUTO-DIM (Dimmer) to change the brightness of the display.
 - Select "AUTO" to dim the display only when you turn the lights on.
- Select "ON" to dim the display.
- BEEP to turn the beep tones on or off.
- RM (Rotary Remote) to change the operative direction of the controls of the optional rotary remote.
- Select "NORM" to use the rotary remote in the factory preset position.
- Select "REV" when you mount the rotary remote on the right of the steering column.
- A.SCRL (Auto Scroll) (page 11).

Note

If you connect an optional power amplifier and do not use the built-in amplifier, the beep tone will be disabled.

- 1 Press SHIFT.
- 2 Press ② (SET UP) repeatedly until the desired setting mode appears.

Each time you press ② (SET UP), the item changes as follows:

 $\begin{array}{c} \mathsf{CLOCK} \to \mathsf{D.INFO}^* \to \mathsf{AMBER/GREEN} \to \\ \mathsf{AUTO\text{-}DIM} \to \mathsf{BEEP} \to \mathsf{RM} \to \mathsf{A.SCRL}^* \\ \end{array}$

* When you have not tune the station or there is no CD/MD being played, these items will not appear.

Note

The displayed item will differ depending on the source.

- 3 Press ④ (→) to select the desired setting (for example: ON or OFF).
- 4 Press SHIFT.
 When the mode setting is complete, the normal playback mode appears.

With Optional Equipment

CD/MD Changer

You can control up to 7 CD and MD changers with this unit.

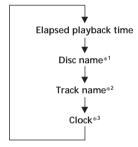
Playing a CD or MD

- 1 Press SOURCE repeatedly to select CD or MD.
- 2 Press MODE until the desired changer appears (for example CD2 or CD3). CD/MD playback starts.

When a CD or MD changer is connected, all the tracks play from the beginning.

Changing the displayed items

Each time you press (DSPL) during CD/MD playback, the item changes as follows:



- *1 If there is no prerecorded name for a CD or MD, "NO NAME" appears in the display.
- *2 If the track name of an MD is not prerecorded, "NO NAME" appears in the display.
- *3 If the dual information function is on, the clock does not appear in the display.

Tip

If the name of the MD is too long, you can scroll it across the display window by pressing (SHIFT), then (1) (\leftarrow) .

Automatically scrolling a disc name

— Auto Scroll

If the disc name or track name on an MD exceeds 8 characters and the Auto Scroll function is on, automatically scrolls on the display as follows:

- The disc name appears when the disc has changed (if the disc name is selected).
- The track name appears when the track has changed (if the track name is selected).
- The disc or track name appears depending on the setting when you press (SOURCE) to select an MD.

If you press (DSPL) to change the display item, the disc or track name of the MD is scrolled automatically whether you set the function on or off.

- 1 Press SHIFT, then press 2 (SET UP) repeatedly until "A.SCRL" appears.
- 2 Press ④ (→) to select "A.SCRL-ON."
- **3** Press (SHIFT).

To cancel Auto Scroll, select "A.SCRL-OFF" in step 2 above.

Displaying the recording date of the currently selected MD

Press $\overline{\text{DSPL}}$ for two seconds during MD playback.

The recording date of the track is displayed for about three seconds.

Locating a specific track

Automatic Music Sensor (AMS)

During playback, press either side of (SEEK/AMS) once for each track you want to skip.



To locate succeeding tracks

To locate preceding tracks

Locating a specific point in a track

— Manual Search

During playback, press and hold either side of SEEK/AMS). Release the button when you have found the desired point.



To search forward

To search backward

Locating a disc by disc number

Direct Disc Selection

Press the number button corresponding to the desired disc number.

The desired disc in the currently selected changer begins playback.

Scanning the tracks

— Intro Scan

You can play the first 10 seconds of all the tracks on the currently selected disc.

- 1 During playback, press <u>SHIFT</u>, then press <u>3</u> (PLAY MODE) repeatedly until "INTRO" appears.
- 2 Press ④ (→) to select "INTRO-ON." Intro Scan starts.
- 3 Press SHIFT.

To go back to the normal playback mode, select "INTRO-OFF" in step 2 above.

Playing tracks repeatedly

— Repeat Play

You can select:

- REP-1 to repeat a track.
- REP-2 to repeat a disc.
- REP-3 to repeat all the discs in the current changer.
- 1 During playback, press (SHIFT).
- 2 Press (6) (REP) repeatedly until the desired setting appears.

Repeat Play starts.

3 Press (SHIFT).

To go back to the normal playback mode, select "REP-OFF" in step 2 above.

Playing tracks in random order — Shuffle Play

You can select:

- SHUF-1 to play the tracks on the current disc in random order.
- SHUF-2 to play the tracks in the current changer in random order.
- SHUF-3 to play all the tracks in random order.
- 1 During playback, press SHIFT.
- 2 Press 7 (SHUF) repeatedly until the desired setting appears.

Shuffle Play starts.

3 Press (SHIFT).

To go back to the normal playback mode, select "SHUF-OFF" in step 2 above.

Labeling a CD = Disc Memo

(CD changer with custom file function)

You can label each disc with a personalized name. You can enter up to eight characters for a disc. If you label a CD, you can locate the disc by name and select the specific tracks for playback (page 13).

1 Play the CD and press LIST for two seconds.

- 2 Enter the characters.
 - Press + to select the desired characters.

$$(A \rightarrow B \rightarrow C \rightarrow \cdots Z \rightarrow 0 \rightarrow 1 \rightarrow 2 \rightarrow \cdots 9 \rightarrow + \rightarrow - \rightarrow * \rightarrow / \rightarrow \backslash \rightarrow > \rightarrow < \rightarrow . \rightarrow _)$$

If you press —, the characters appear in reverse order.

If you want to enter a blank space between characters, select "_" (underbar).

2 Press (4) (→) after locating the desired character.

The flashing cursor moves to the next space.

If you press \bigcirc (\leftarrow), the flashing cursor moves to the left.

- 3 Repeat steps 1 and 2 to enter the entire name.
- 3 To return to the normal CD playback mode, press (LIST) for two seconds.

Tip
To erase/correct a name, enter "_" (under-bar) for each character.

Displaying the disc memo

Press (DSPL) during CD playback.

Each time you press DSPL during CD playback, the item changes as follows:

Erasing the disc memo

- 1 Select the CD changer (page 10).
- 2 Press LIST for two seconds.
- **3** Press DSPL for two seconds.
- 4 Press \oplus or \bigcirc to select the name that you want to erase.
- Press (5) (ENTER) for two seconds. The name is erased. Repeat steps 4 and 5 if you want to erase other names.
- 6 Press LIST for two seconds. The unit returns to the normal CD playback mode.

Locating a disc by name

 List-up (CD changer with custom file function or MD changer)

You can use this function with discs that have been assigned a custom name. For more information on disc names, refer to "Labeling a CD" (page 12).

1 Press (LIST) momentarily.
The name assigned to the disc currently playing appears in the display.

- 2 Press <u>LIST</u> repeatedly until you find the desired disc.
- 3 Press (5) (ENTER) to play back the disc.

Notes

- Once a disc name has been displayed for five seconds, the display goes back to its normal playback mode. To turn off the display, press DSPL.
- The track names are not displayed during MD playback.
- If there are no discs in the magazine, "NO DISC" appears in the display.
- If a disc has not been assigned a custom file, "*******" appears in the display.
- If the disc information has not been read by the unit, "NOT READ" appears in the display. To load the disc, first press the number button, then choose the disc that has not been loaded.
- The information appears only in upper case. There are also some letters which cannot be displayed (during MD playback).

Selecting specific tracks for playback

- Bank

(CD changer with custom file function)

If you label the disc, you can set the unit to skip tracks and play only the tracks you want.

1 Start playing the disc and press SHIFT. Then press (3) (PLAY MODE) for two seconds.

Bank edit mode

Note

If you have not labeled the disc, the bank edit mode does not appear and the program edit mode appears. To go back to the normal playback mode, press (SHIFT).

2 Press either side of SEEK/AMS to select the track number you want to skip and press (5) (ENTER).

The indication changes from "PLAY" to "SKIP." If you want to return to "PLAY," press (5) (ENTER) again.

- 3 Repeat step 2 to set the "PLAY" or "SKIP" mode on all the tracks.
- 4 Press ③ (PLAY MODE) for two seconds. The unit returns to the normal CD playback mode.
- 5 Press (SHIFT).

Notes

- You can set the "PLAY" and "SKIP" mode on up to 24 tracks.
- · You cannot set the "SKIP" mode on all the tracks.

Playing the specified tracks only

You can select:

- BANK-ON to play the tracks with the "PLAY" setting.
- BANK-INV (Inverse) to play the tracks with the "SKIP" setting.
- 1 During playback, press (SHIFT), then press (3) (PLAY MODE) repeatedly until "BANK" appears.
- 2 Press ④ (→) repeatedly until the desired setting appears.



Playback starts from the track following the current one.

3 Press (SHIFT).

To go back to the normal playback mode, select "BANK-OFF" in step 2 above.

DSP

With the optional XDP-U50D connected

The optional XDP-U50D lets you add some effects to the sound field of the currently selected source.

Selecting a surround menu

You can select a desired surround menu to best fit the audio source. The following menus can simulate different sound fields and enhance the sound so that you can feel as if you are in a live concert.

Surround menu

HALL	Concert hall
JAZZ	Jazz club
DISCO	Disco with thick walls
THEATER	Movie theater
PARK	Big open space
LIVE	Live concert
OPERA	Opera house
CHURCH	Church/chapel with a lot of reverberation
STADIUM	Open-air concert in a stadium
CELLAR	Cellar with a lot of reverberation
DEFEAT	Normal sound without any DSP effects

- 1 Press (SOURCE) to select a source (radio, CD or MD).
- 2 Press SOUND repeatedly until "SUR" appears.

3 Press + or - to select the desired surround menu.

The surround menu appears in the order shown above.

After three seconds, the display goes back to the normal playback mode.

Adjusting the effect level

- 1 Press SOURCE to select a source (radio, CD or MD).
- 2 Press (SOUND) for two seconds.

3 Press + or - repeatedly until the desired surround menu appears.



4 Press (4) (→).

5 Press \oplus or \bigcirc to adjust the level. You can adjust the level from 0 to 10. Increase the level to enjoy more enhanced effects.

6 Press (SOUND) for two seconds.

Storing the surround effect onto CDs

— Digital Signal Processor (DSP) Custom File (CD changer with custom file function)

Once you have registered the desired surround menu onto the discs, you can enjoy the same surround menu every time you play them. (Only when you have labeled the disc by the Custom File function.)

- 1 Press (LIST) for two seconds.
- 2 Press LIST until the surround menu appears.

DSP custom file mode

- 3 Press + or to select the desired surround menu.
- 4 Press LIST for two seconds.
 When the effect setting is complete, the display goes back to the normal playback mode.

Playing the disc with the stored surround menu

- 1 Press SHIFT, then press ③ (PLAY MODE) repeatedly until "D.FILE" appears.
- 2 Press ④ (→) to select the "D.FILE-ON."
 After five seconds, the display goes back to the normal playback mode.

To cancel to play the disc with stored surround menu, select "D.FILE-OFF" in step 2.

Changing the stored surround effect

Play the disc whose surround mode you want to change, and follow the steps of "Storing the surround effect onto CDs."

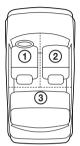
Erasing the stored surround effect

Select "DEFEAT" in step 3 of "Storing the surround effect onto CDs."

Selecting the listening position

You can set the time for the sound to reach the listeners from the speakers.

The unit can simulate a natural sound field so that you can feel as if you are in the center of the sound field wherever you sit in the car.



Display	Center of
window	soundfield
LP1	Normal setting
ALL	(1 + 2 + 3)
LP2	Front part
FRONT	(1) + (2)
LP3	Right front (2)
FRONT R	Right Hollt (2)
LP4	Left front (1)
FRONT L	Lett Hollt (①)
LP5	Rear part (③)
REAR	ivai part (@)

1 Press SOUND momentarily until "LP1" appears.



2 Press + or - to select the desired listening position.

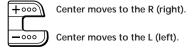
The listening positions appear in the order shown above.

After three seconds, the display goes back to the normal playback mode.

Adjusting the listening position

- 1 Press SOUND for two seconds.
- 2 Press (SOUND) repeatedly until the desired listening position appears.
- **3** Press **④** (→).

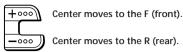
4 Press
or
to adjust the center of the sound field to the left or right. Then set the center of the sound field.



5 Press 4 (\rightarrow) .



6 Press + or - to adjust the center of the sound field to the front or rear.

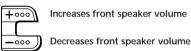


7 Press SOUND for two seconds. When the effect setting is complete, the normal playback mode appears.

Adjusting the fader (FAD)

Normally, with the DSP mode on, the volume of the output sound from the rear speakers is lowered automatically to improve the efficiency of the listening position setting. If you want to raise the rear speaker volume, adjust the fader.

- 1 Follow steps 1 to 3 of "Selecting a surround menu" (page 13).
- 2 Press SOUND repeatedly until "FAD" appears.
- 3 Press \oplus or \bigcirc to adjust the fader.



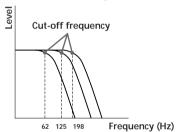
After three seconds, the display goes back to the normal playback mode.

Adjusting the volume of the subwoofer(s)

- 1 Press (SOURCE) to select a source (radio, CD or MD).
- 2 Press SOUND repeatedly until "SUB" appears.
- **3** Press \oplus or \bigcirc to adjust the volume. After three seconds, the display goes back to the normal playback mode.

Adjusting the frequency of the subwoofer(s)

To match the characteristics of the connected subwoofer(s), you can cut the unwanted high and middle frequency signals entering the subwoofer(s). By setting the cut-off frequency (see the diagram below), the subwoofer(s) will output only low frequency signals so that you can get a clearer sound image.



- 1 Press SOURCE to select a source (radio, CD or MD).
- 2 Press (SOUND) for two seconds.
- 3 Press SOUND repeatedly until "SUB" appears.

4 Press + or - to select the desired cutoff frequency.

The cut-off frequency in the display changes.

$$62 \rightarrow 78 \rightarrow 99 \rightarrow 125^* \rightarrow 157 \rightarrow 198 \text{ Hz}$$

* Factory-set frequency

Press SOUND for two seconds. When the frequency setting is complete, the display goes back to the normal playback mode.

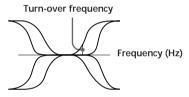
Adjusting the volume of the bass and treble

You can adjust the volume of the bass and treble to best fit the acoustic characteristics inside your car.

- 1 Press SOURCE to select a source (radio, CD or MD).
- 2 Press SOUND repeatedly until "BAS" or "TRE" appears.
- 3 Press (+) or (-) to adjust the volume. After three seconds, the display goes back to the normal playback mode.

Adjusting the turn-over frequency

You can adjust the bass and treble turn-over frequencies.

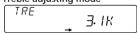


- 1 Press (SOURCE) to select a source (radio, CD or MD).
- 2 Press SOUND for two seconds.
- 3 Press SOUND repeatedly until "BAS" or "TRE" appears.

Bass adjusting mode



Treble adjusting mode



4 Press + or - to select the turn-over frequency.

The turn-over frequencies change as follows:

Rass

198 Hz → 250 Hz → 314 Hz* → 396 Hz

Treble:

 $2.0 \text{ kHz} \rightarrow 3.1 \text{ kHz}^* \rightarrow 4.0 \text{ kHz} \rightarrow 5.0 \text{ kHz}$

* Factory-set frequency

5 Press (SOUND) for two seconds.
The display goes back to the normal playback mode.

Listening to each program source in its registered surround menu

Source Sound Memory

You can listen to the same source always in the same surround menu even after changing the program source or turning the unit on and off again.

Note

"LSM" (Last Sound Memory) appears on the TV display when you have selected a surround menu.

Changing the line output level

- 1 Press SHIFT, then press 2 (SET UP) until "L.OUT" appears.
- 2 Press ④ (→) to select the desired setting (–10 dB or –16 dB).

ΕN

TV/Video

With the optional TV tuner and TV monitor connected

Watching the TV

- 1 Press (SOURCE) repeatedly until "TV" appears.
- 2 Press either side of (SEEK/AMS) to select the desired TV band.

Watching the video

- 1 Press SOURCE repeatedly until "TV" appears.
- 2 Press MODE repeatedly to select "VIDEO 1."
 Play back the video.

Note

"VIDEO 2" appears if the VIDEO 2 terminal of the TV monitor is selected.

Memorizing TV channels automatically

The unit selects the TV channels with the strongest signals and memorizes them in the order of their frequency.

Caution

When tuning in the station while driving, use Best Tuning Memory to prevent accidents.

- 1 Press SOURCE repeatedly until "TV" appears.
- 2 Press SHIFT, then press ③ (PLAY MODE) repeatedly until "AUTO MEM" appears.
- 3 Press ④ (→).
 The unit stores TV channels in the order of their frequencies on the number buttons.
 A beep sound and setting is stored.
- 4 Press (SHIFT).

Notes

- The unit does not store TV channels with weak signals.
 If only a few TV channels are received, some number buttons will remain empty.
- When a preset number is indicated in the display, the unit starts storing TV channels from the one currently displayed.

Memorizing only the desired TV channels

You can store up to 10 channels on the number buttons in the order of your choice.

- 1 Press (SOURCE) repeatedly until "TV" appears.
- 2 Press either side of (SEEK/AMS) to tune in the TV channel that you want to store on the number button.
- 3 Keep the desired number button (1 to 10) pressed for two seconds until you hear a beep tone.

The number button indication appears in the display.

Note

If you try to store another channel on the same number button, the previously stored channel will be erased.

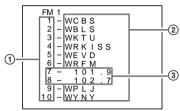
Storing the TV channel names

Do the steps in "Storing the station names" (page 8).

Displaying the TV or radio station names

Press (LIST) momentarily during TV or radio reception.

Example: When receiving the FM1 band



- 1) Preset number
- ② Stored station names
- ③ Frequencies*
- * If the name of a station is not stored, the frequency of that station will be displayed instead.

Notes

- It may take some time before all indications appear in the display.
- The TV program does not appear during list display.
- The contents of the preset memory cannot be listed when the unit is in the simultaneous play mode (page 19).

Turning off the display

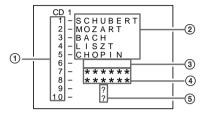
During radio reception, press $\begin{tabular}{l} LIST \\ again. \end{tabular}$

During TV reception, the list display on the TV monitor will automatically turn off after a few seconds.

Displaying the information stored on discs

Press (LIST) momentarily during CD/MD playback.

Example: When CD changer 1 is selected.



- 1 Disc numbers
- 2 Titles stored on the custom file
- ③ No disc is loaded*1
- (4) No stored titles*2
- (5) TOC information has not been identified yet*3
- *1 A blank space is displayed if there is a disc number representing an empty slot in the disc magazine.
- *2 If a title is not registered in the custom file, "*****" is displayed.
- *3 If the disc information has not been read yet, "?" is displayed.

Notes

- It may take some time until all indications appear in the display.
- The TV program does not appear during list display.
- The contents of the preset memory cannot be listed when the unit is in the simultaneous play mode.

Turning off the display

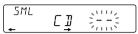
Press (LIST) again.

Watching the TV or video while listening to a CD or

MD — Simultaneous Play

The simultaneous play function does not work while you are listening to the radio.

1 Press (SOURCE) for two seconds.



2 Press ① (←).

3 Press SOURCE repeatedly to select a CD or MD.

4 Press (4) (→).

5 Press SOURCE repeatedly to select a TV or video.

6 Press (SOURCE) for two seconds. Simultaneous Play starts.

Returning to the normal mode

To cancel the CD or MD, do the steps above and select "--" in step 3.

To cancel the TV or video, do the steps above and select "--" in step 5.

Note

If you press the EJECT button on a CD/MD changer when the unit is in the simultaneous play mode, the simultaneous play is canceled.

Additional Information

Precautions

- If your car was parked in direct sunlight resulting in a considerable rise in temperature inside the car, allow the unit to cool off before operating it.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of twospeaker systems, set the fader control to the centre position.
- If your car is equipped with a power aerial, note that it will extend automatically while the unit is operating.

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

Notes on handling CDs

A dirty or defective disc may cause sound dropouts while playing. To enjoy optimum sound, handle the disc as follows. Handle the disc by its edge. To keep the disc clean, do not touch the surface.



Do not stick paper or tape on the labelled surface.



Do not expose the discs to direct sunlight or heat sources such as hot air-ducts, or leave them in a car parked in direct sunlight where there can be a considerable rise in the temperature inside the car.



Before playing, clean the discs with an optional cleaning cloth. Wipe each disc from the centre out.

Do not use solvents such as benzine, thinner, commercially available cleaners or antistatic spray intended for analog discs.



Notes on moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the CD player. Should this occur, the unit will not operate properly. In this case, remove the disc and wait for about an hour until the moisture evaporates.

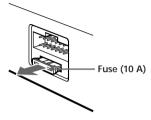
When you play 8 cm (3 in.) CDs

Use the optional Sony compact disc single adapter (CSA-8) to protect the CD player from being damaged.

Maintenance

Fuse replacement

When replacing the fuse, be sure to use one that matches the amperage described on the fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

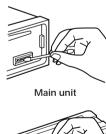


Warning

Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.

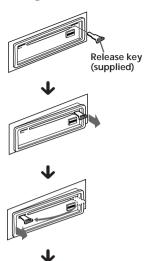
Cleaning the connectors

The unit may not function properly if the connectors between the unit and the front panel are not clean. To prevent this, open the front panel by pressing (RELEASE), then detach it and clean the connectors with a cotton swab dipped in alcohol. Do not apply too much force. Otherwise, the connectors may be damaged.



Back of the front panel

Dismounting the unit



Pull the unit out while the release key is inserted.



Press the clip inside the front cover with a thin screwdriver, and lever the front cover free.

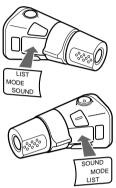


Attaching the label to the rotary remote

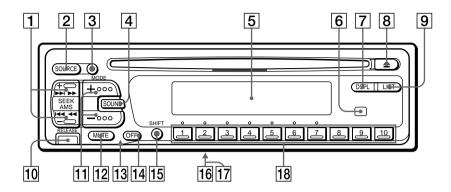
You can control this unit with the optional rotary remote (RM-X2S). $\label{eq:main_control} % \begin{subarray}{ll} \end{subarray} % \begin{suba$

Several labels are supplied with the rotary remote. Attach the label that matches the functions of this unit and the mounting position of the rotary remote.

After you mount the rotary remote, attach the label as in the illustration below.



Location of controls



Refer to the pages for details.

- SEEK/AMS (seek/Automatic Music Sensor/manual search) button 5, 6, 7, 8, 11, 13, 18
- 2 SOURCE (source select) button 5, 7, 8, 10, 14, 16, 17, 18, 20
- 3 MODE (band/changer select) 7, 8, 10
- 4 SOUND button 9, 14, 15, 16, 17
- 5 Display window
- Receptor for the optional wireless remote
- DSPL (display mode change) button 5, 8, 9, 10, 11, 12
- 9 LIST button

Disc Memo 12

DSP 15

List-up 9, 13, 19

Station Memo 8, 9

- RELEASE (front panel release) button 4, 21
- 11

 (volume//bass/treble/balance/fader control) buttons 5, 8, 9, 12, 14, 15, 16, 17

- 12 MUTE button 9
- Reset button (located on the front side of the unit hidden by the front panel) 4
- 14 OFF button 4, 5
- 15 SHIFT button

PLAY MODE 6, 7, 8, 11, 13, 15, 18

REP 6, 11

SET UP 5, 10, 17

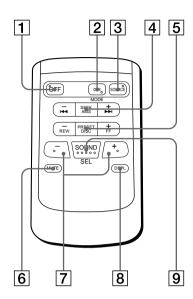
SHUF 6, 12

- 16 POWER SELECT switch (located on the bottom of the unit)
 See "POWER SELECT Switch" in the Installation/Connections manual.
- 17 LINE OUT/IN SELECT switch (located on the bottom of the unit)
 See "LINE OUT/IN SELECT Switch" in the Installation/Connections manual.
- 18 During radio/TV reception: Number buttons 7, 8, 18

During CD/MD playback:
Direct disc selection buttons 11

Location of controls

Optional wireless remote (RM-X41)



The buttons of the wireless remote operate control the same functions as those on this unit.

- 1 OFF button
- MODE/DIR button
 MODE controls the same function on this unit.
- 3 SOURCE button
- 4 SEEK/AMS button
- 5 PRESET/DISC button

You cannot do manual search and manual tuning with the remote.

- 6 MUTE button
- 7 + buttons
- 8 DSPL button
- 9 SOUND button

When the POWER SELECT switch is set to the ③ position, the unit cannot be operated with the wireless remote unless ⑤OURCE) on the unit is pressed or a CD is inserted to activate the unit first.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION 17 watts per channel minimum continuous average power into

4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1 % total harmonic distortion.

Oth	er spe	ecificati	ons
CD	playe	r sectio	n

System Compact disc digital audio

system Signal-to-noise ratio 90 dB

Frequency response 10 – 20,000 Hz Wow and flutter Below measurable limit

Laser Diode Properties

Material GaAlAs
Wavelength 780 nm
Emission Duration Continuous
Laser output power Less than 44.6 µW*

* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

Tuner section

FΜ

Tuning range 87.5 – 107.9 MHz
Antenna terminal External antenna connector
Intermediate frequency 10.7 MHz

Usable sensitivity 8 dBf

Selectivity 75 dB at 400 kHz Signal-to-noise ratio 62 dB (stereo), 65 dB (mono)

Harmonic distortion at 1 kHz

0.9 % (stereo), 0.5 % (mono)

Separation 35 dB at 1 kHz Frequency response 30 – 15,000 Hz

Capture ratio 2 dB

AM

Tuning range 530 – 1,710 kHz

Antenna terminal External antenna connector Intermediate frequency 10.71 MHz/450 kHz

Sensitivity 30 µV

Power amplifier section

Outputs Speaker outputs (sure seal connectors)

Speaker impedance 4 – 8 ohms

Maximum power output 40 W × 4 (at 4 ohms)

General

Optional accessories

Outputs Line outputs (2)

Equalizer output Power antenna relay control lead

Power amplifier control lead

Telephone mute control

lead

Tone controls $\begin{array}{c} \text{Illumination control lead} \\ \text{Bass} \pm 8 \text{ dB at } 100 \text{ Hz} \\ \text{Treble} \pm 8 \text{ dB at } 10 \text{ kHz} \end{array}$

Power requirements 12 V DC car battery (negative ground)
Dimensions Approx. $188 \times 58 \times 177 \text{ mm}$

 $(7^{1/2} \times 2^{3/8} \times 7 \text{ in.})$

(w/h/d)

Mounting dimensions Approx. $178 \times 50 \times 154 \text{ mm}$

 $(7^{1}/8 \times 2 \times 6^{1}/8 \text{ in.})$

(w/h/d)

Mass Approx. 1.3 kg (2 lb. 14 oz.) Supplied accessories Parts for installation and

connections (1 set) Front panel case (1)

Rotary remote RM-X2S Wireless remote RM-X41

BUS cable (supplied with an RCA pin cord)

RC-61 (1 m), RC-62 (2 m)

RCA pin cord RC-63 (1 m), RC-64 (2 m),

RC-63 (1 m), l RC-65 (5 m)

Cleaning cloth XP-CD1
Compact disc single

adapter CSA-8 CD changer

Optional equipment CD changer CDX-705 (10 discs).

CDX-T65 (6 discs), CDX-T62 (6 discs) MD changer MDX-60, MDX-61

Source selector XA-C30 Digital preamplifier XDP-U50D

TV tuner XT-40V, etc.

Design and specifications are subject to change without notice.

Troubleshooting guide

The following checklist will help you remedy problems you may encounter with your unit. Before going through the checklist below, check the connection and operating procedures.

General

Problem	Cause/Solution
No sound.	 Adjust the volume with ±. Set the fader control to the center position for two-speaker systems.
The contents of the memory have been erased.	 The power cord or battery has been disconnected. The reset button has been pressed. → Store again into the memory.
Indications do not appear in the display.	Remove the front panel and clean the connectors. See "Cleaning the connectors" (page 21) for details.
No beep tone.	 An optional power amplifier is connected and you are not using the built-in amplifier. The beep tone is muted (page 10).

CD/MD playback

Problem	Cause/Solution
A disc cannot be loaded.	 Another CD is already loaded. The CD was forcibly inserted upside down or in the wrong way (MD).
Play does not begin.	Defective MD or dusty CD.
A disc is automatically ejected.	The ambient temperature exceeds 50° C (122° F).
The operation buttons do not function.	Press the reset button.
The sound skips due to vibration.	 The unit is installed at an angle of more than 20°. The unit is not installed in a sturdy part of the car.

Radio/TV reception

Problem	Cause/Solution
Preset tuning is not possible.	 Store the correct frequency in the memory. The broadcast signal is too weak.
Automatic tuning is not possible.	The broadcast signal is too weak. → Use manual tuning.
The "ST" indication flashes.	 Tune in the frequency precisely. The broadcast signal is too weak. → Set to the MONO mode (page 8).

DSP functions Problem Cause/Solution No sound, or sound is too low. The volume of the rear speakers may have been automatically lowered in order to maximize the effect of the listening position adjustment. → Press ⊕ to adjust the balance. The speaker balance can be set separately for the DSP on mode and DSP off mode (page 15). The speaker balance can be set separately for the DSP on mode and DSP off mode (page 15).

Error displays (when optional CD/MD changer is connected)

The following indications will flash for about five seconds, and an alarm sound will be heard.

Display	Cause	Solution
NO MAG	The disc magazine is not inserted in the CD/MD changer.	Insert the disc magazine with discs into the CD/MD changer.
NO DISC	No disc is inserted in the CD/MD changer.	Insert discs in the CD/MD changer.
NG DISCS	A CD/MD cannot play because of some problem.	Insert another CD/MD.
ERROR*1	A CD is dirty or inserted upside down.*2	Clean or insert the CD correctly.
	An MD does not play because of some problem.*2	Insert another MD.
BLANK*1	No tracks have been recorded on an MD.*2	Play an MD with tracks recorded on it.
RESET	The CD/MD changer cannot be operated because of some problem.	Press the reset button of the this unit.
NO READY	The lid of the MD changer is open or MDs are not inserted properly.	Close the lid or inserted the MDs properly.
HI TEMP	The ambient temperature is more than 50° C (122° F).	Wait until the temperature goes down below 50° C (122° F).

^{*1} When an error occurs during playback of an MD or CD, the disc number of the MD or CD does not appear in the display.

If the above-mentioned solutions do not help improve the situation, consult your nearest Sony dealer.

^{*2} The disc number causing the error appears in the display.

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